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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,188	12/30/2003	Horst Grafe	HM-386CIP	9891

7590 06/08/2005  
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EXAMINER

PRONE, JASON D

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/749,188

Applicant(s)

GRAFE ET AL.

Examiner

Jason Prone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 1 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/755,869.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 19 January 2000. It is noted, however, that applicant has not filed a certified copy of the 100 01 928.5 application as required by 35 U.S.C. 119(b).

### ***Election/Restrictions***

2. Applicant's election without traverse of Group II in the reply filed on 18 April 2005 is acknowledged.

3. Claim 1 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 18 April 2005.

### ***Drawings***

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "gear wheel shafts that support the knife carriers", of claim 2, (Figure 4 does not show any type of structure connecting the gear wheels (11, 11')), "each short side has a knife arrangement", of claim 2, and the knife carriers (1,1'), "bearing chocks", of claims 2 and 3, and "arch-shaped cutting knives" of claims 6 and 7, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

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Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to because in Figures 1a-d and 3a-c, strip 6 appears to be continuous in Figures 1a-d and again in 3a-c. Strip 6 should be separate for each individual Figure as in Figures 4a and 4b. In Figure 1d, the empty box with an indicator line should be deleted. Figure 1a and 2 appear to both represent eccentric bushing 13 at its lowest zenith point and eccentric bushing 13' at its highest zenith point, however, Figure 2 shows gear wheels that are engaged and Figure 1a clearly shows the gear wheels in an unengaged state. It is unclear how Figures representing the same position can have

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alternate forms. 9Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: In Figure 2, items "17", "17' ", "16", and "15". Also, in Figure 3a, item "ΔH". Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior

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version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

7. The specification is objected to under 37 CFR 1.71, as being confusing and difficult to comprehend the invention and compare with prior art. For example, the following items are not understood: It is not understood how the shearing apparatus works. For example, it is unclear how the gear wheels are always in engagement, how the knife carriers rotate, and how the eccentric bushings rotate. See the rejections under 35 USC § 112, first paragraph for more details

Applicant is required to submit an amendment which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

### ***Claim Objections***

8. Claim 3 and 4 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

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Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In regards to dependant claim 3, the phrase "adjusting the distance of the knife carriers through eccentric bushings" is disclosed on lines 17-18 of independent claim 2. This phrase in claim 3 is redundant and not needed. Dependant claim 4 is identical to the last three lines of independent claim 2. Claim 4 is redundant and is not needed.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 2-9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

11. It is not clear how the apparatus works. The specification discloses that the knife carriers are connected to and rotated by the gear wheels. The knife carriers are also connected to and rotated by the eccentric bushings. First the phrase on page 12 lines 16-17 "the gear wheels are always in engagement" is unclear. Using Figures 1a-c and 3a-c, the gear wheels are clearly not an engagement with each other. Also, it is assumed that eccentric bushings rotate about undisclosed items 17 and 17'. When the eccentric bushings rotate, the respective knife carrier and gear wheel will rotate as well. Looking at item 17,

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17', it is unclear how the gear wheels will still be in contact with one another when the eccentric bushings are rotated to an opposite position of the position shown in Figure 2. Next, using Figures 2, 1a, and 1d, it is unclear how the knife carriers obtain their horizontal and vertical positions. Figure 2 shows eccentric bushing at its lower zenith point and eccentric bushing 13' at its upper zenith point (same as Figure 1a). When the eccentric bushings are in these positions, this is the only time the gear wheels make contact; therefore, the only time the knife carriers can change positions. Figure 1d shows eccentric bushing 13 at its upper zenith point and bushing 13' at its lower zenith point, as discussed above, the gear wheels will not be in contact at this point and is, therefore, unclear how the knife carriers obtain a vertical position since there is no structure disclosed that can rotate the knife carriers when the gear wheel are not connected. It is unclear how the eccentric bush 13 can rotate. Knife carrier 1 along with shaft 12 appears to be connected to gear unit 14. It is uncertain how eccentric bushing can rotate about item 17 if the bushing is connected to shaft 12. It is also unclear what structure rotates the gear wheels. It is unclear what structure connects gear wheels (11,11') with a respective knife carrier (1,1').

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 2-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.



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14. In regards to claim 2, the phrase "gear wheels arranged at a fixed axial spacing in pairs opposite each other" is unclear. It is uncertain how the gear wheels are at a fixed axial distance from each other when Figures 1a and 1d clearly show the gear wheels at two different axial distances. Figure 2 suggests that the gear wheels are connected to a respective knife carrier, which in turn is connected to a respective rotating eccentric bushing. When the eccentric bushings rotate about their axis (17, 17') the gear wheels will be forced to move further and further apart. Also, the phrase "in permanent engagement with each other" contradicts the earlier statement of "gear wheels arranged at a fixed axial spacing". It is uncertain how the wheels can be spaced and in permanent engagement. Also, it is unclear how the wheels remain in permanent engagement (see above).

15. In regards to claim 2, the phrase "the gear wheels having shafts that support knife carrier" is unclear. It is uncertain what structure these shafts incorporate and how they perform the intended supporting function.

16. In regards to claim 2, the phrase "each short side has a knife arrangement" is unclear. The Figures only show one short side of each carrier incorporating a knife arrangement. It is unclear what structure the second knife arrangement incorporates.

17. In regards to claim 2, the phrase "accelerating the rate of rotation of the shear" is unclear. It is uncertain what structure performs the acceleration function.

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18. In regards to claim 2, the phrase "adjusting the distance of the knife carriers through eccentric bushings" is unclear. It is uncertain what structure performs the adjusting function. It is uncertain how the knife carriers are adjusted. It is unclear what distance is being adjusted. Using Figure 2, it is unclear how the knife carriers could be adjusted. Also, on page 5 lines 11-13, the phrase "the knife carriers on both sides are mounted in a shear cassette on shafts of gear wheels with a fixed axial distance between them" contradicts the previously list phrase that states "adjusting the distance of the knife carriers...".

19. In regards to claim 2, the phrase "bearing chocks" is unclear. It is uncertain what structure the bearing chocks incorporate.

20. In regards to claim 5, the phrase "the knife carriers are synchronized for opposite rotation within the shear cassette through gear wheels of the knife carriers which are in constant engagement with each other" is unclear. See paragraph 8 above.

21. It is to be noted that claims 2-9 have not been rejected over prior art. It may or may not be readable over the prior art but cannot be determined at this time in view of the issues under 35 USC § 112.

### ***Conclusion***

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hahn, Hallden, Greven, Nomura et al., Feldkamper, Eiting et al., Ginzburg et al., Bodnar, Hornung et al., Cracchiolo et al., Sato et al., Punchovsky, Grafe et al., and Rothauer.

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23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 571-272-4513. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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